

REMARKS

The applicants have studied the Election/Restriction Office Action dated May 7, 2003, and have made amendments to the claims. By virtue of this amendment, claims 1-13 and 89-90 are pending, claims 14-88 is withdrawn without prejudice or disclaimer, and new claim 90 has been added. It is respectfully submitted that the application, as amended, is in condition for allowance.

Applicants elect to pursue a smaller subset than the group restricted by the Examiner to focus only on the claims directed to a sensor with a "necked down region in the substrate." Therefore, the applicants in accordance with the Examiner's restriction requirement elect claims 1-13 and 89 drawn to a sensor for implantation, classified in class 604, subclass 44. New claim 90, which depends from independent claim 1, should also be in the same classification. Claims 14-88 are withdrawn as being directed to a non-elected invention. The applicants expressly reserve the right to file a divisional application directed to this subject matter at a later date.

In view of the foregoing, it is respectfully submitted that the application and all of the elected claims are in condition for allowance. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call the undersigned attorney at (818) 576-4110 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

Dated: 5/23/03

By: Richard Yoon  
Richard Yoon  
Reg. No. 42,247

Medtronic Minimed, Inc.  
18000 Devonshire Street  
Northridge, CA 91325-1219  
Telephone (818) 576-4110; Facsimile (818) 576-6202

Clean Copy of the Pending Claims:

1. A sensor for implantation in a body, the sensor comprising:  
a substrate with notches cut in the substrate to form a necked down region in the substrate; and  
at least one sensor electrode formed from one or more conductive layers.
2. A sensor in accordance with claim 1, wherein the thickness of the substrate ranges from approximately  $25\mu$  to  $350\mu$ .
3. A sensor in accordance with claim 1, wherein the thickness of the substrate ranges from  $5\mu$  to  $750\mu$ .
4. A sensor assembly in accordance with claim 1; further including:  
a slotted needle having a slot; and  
wherein the notches creating the necked down region that allows the substrate to slide into the slotted needle that has the slot narrow enough to permit passage of the necked down region, but prevents a non-necked down region of the substrate from pulling out of the slotted needle through the slot.
5. A sensor assembly in accordance with claim 4, wherein slot of the slotted needle permits the necked down region of the substrate to slide down the slot.
6. A sensor in accordance with claim 1, wherein a width of the substrate in the non-necked down portion is sized to fit within a slotted needle having a diameter smaller than 21 gauge.
7. A sensor in accordance with claim 6, wherein a width of the substrate in the non-necked down portion is sized to fit within a slotted needle having a diameter smaller than 22 gauge.

8. A sensor in accordance with claim 7, wherein a width of the substrate in the non-necked down portion is sized to fit within a slotted needle having a diameter smaller than 23 gauge.

9. A sensor in accordance with claim 8, wherein a width of the substrate in the non-necked down portion is sized to fit within a slotted needle having a diameter smaller than 24 gauge.

10. A sensor in accordance with claim 1, wherein at least one of the at least one sensor electrode is formed on a first surface of the substrate.

11. A sensor in accordance with claim 10, wherein all of the at least one sensor electrode are only formed on the first surface.

12. A sensor in accordance with claim 10, wherein at least another one of the at least one sensor electrodes is formed on a second surface of the substrate.

13. A sensor in accordance with claim 12, wherein a third one of the at least one sensor electrode is a reference electrode configured to contact a skin surface.

89. A sensor set comprising:

- a) a mounting base adapted for mounting onto a patient's skin;
- b) a sensor as claimed in claim 1; and
- c) an insertion needle carried by the mounting base to protrude from the mounting base and having at least a portion of the sensor nested within the insertion needle, the insertion needle defining a longitudinally extending slot along one side to permit sliding withdrawal of the insertion needle from the mounting base and the nested portion of the sensor and to accept the necked down region of the substrate.

90. (New) The sensor of claim 1, wherein the notches are cut in the width of the substrate to form the necked down region of the substrate.